

Table 6-1

**PUMP STATION COMPLEX**  
**SURFACE SOIL AND SUBSURFACE SOIL ANALYTICAL RESULTS SUMMARY**  
**CANOL PUMP STATION J**  
**MILE POST 1,285.5 ALASKA HIGHWAY, ALASKA**

	BACKGROUND		SOURCE			
EPA Sample Number	98314029	98314030	98314000	98314001	98314002	98314003
Sample Location Number	BG01SS	BG02SS	PC01SS	PC02SS	PC03SS	PC04SS
Depth (feet bgs)	0-0.5	2	0-0.5	2.0-3.0	0-0.5	2.0-3.0
<b>VOCs (µg/kg)</b>						
2-Pentanone, 4-methyl-	4.9 UJK (49) <sup>b</sup>	2.4 U	6.2 U	<b>1440</b>	6.3 U	2 U
2-Propanone	98.5 UJK (985) <sup>b</sup>	115 U	125 U	693 UJK	214 U	<b>62.6</b>
Benzene	4.9 UJK (9.6) <sup>b</sup>	2.4 U	6.2 U	<b>21.3</b>	6.3 U	2 U
Benzene, (1-methylethyl)-	4.9 UJK (49) <sup>b</sup>	2.4 U	6.2 U	<b>179</b>	6.3 UJK	2 U
Benzene, 1,2,4-trimethyl-	4.9 UJK (49) <sup>b</sup>	2.4 U	6.2 U	<b>5140</b>	6.3 UJK	2 U
Benzene, 1,2-dimethyl-	4.9 UJK (49) <sup>b</sup>	2.4 U	6.2 U	<b>1340</b>	6.3 U	2 U
Benzene, 1,3,5-trimethyl-	4.9 UJK (49) <sup>b</sup>	2.4 U	6.2 U	<b>7490</b>	6.3 UJK	2 U
Benzene, 1-methyl-4-(1-methylethyl)-	4.9 UJK (49) <sup>b</sup>	2.4 U	6.2 U	<b>2700</b>	6.3 UJK	2 U
Benzene, tert-butyl-	4.9 UJK (49) <sup>b</sup>	2.4 U	6.2 U	<b>7.3</b> U	6.3 UJK	2 U
Carbon disulfide	4.9 UJK (49) <sup>b</sup>	2.4 U	6.2 U	7.3 U	6.3 U	4 U
Ethylbenzene	4.9 UJK (49) <sup>b</sup>	2.4 U	6.2 U	<b>251</b>	6.3 U	2 U
MP-Xylene	9.8 UJK (98) <sup>b</sup>	4.7 U	12.5 U	<b>904</b>	12.6 U	4 U
Naphthalene	9.8 UJK (98) <sup>b</sup>	4.7 U	12.5 U	<b>198</b>	12.6 UJK	4 U
Toluene	4.9 UJK (7.9) <sup>b</sup>	2.4 U	6.2 U	<b>12.6</b>	7	2 U
<b>SVOCs (µg/kg)</b>						
2,4-Dimethylphenol	159 U	162 U	205 U	278 U	206 U	156 U
4-Methylphenol	159 U	162 U	205 U	278 U	206 U	156 U
Bis(2-ethylhexyl) phthalate	796 U	809 U	<b>1210</b>	<b>1230</b> JQ	10300 U	780 U
Dibenzofuran	159 U	162 U	205 U	<b>29.3<sup>b</sup></b> JH	206 U	156 U
Naphthalene	159 U	162 U	<b>204</b> JQ	<b>33300</b>	206 U	156 U
Naphthalene, 1-methyl-	159 U	162 U	205 U	<b>96700</b>	206 U	156 U
Naphthalene, 2-methyl-	159 U	162 U	<b>313</b>	<b>184000</b>	206 U	156 U
Phenanthrene	159 U	162 U	205 U	<b>5310</b>	206 U	156 U
Phenol	159 U	162 U	205 U	278 U	206 U	156 U
Phenol, 2-methyl-	159 U	162 U	205 U	278 U	206 U	156 U
Pyrene	159 U	162 U	205 U	<b>329</b>	2060 UJK	156 U
Retene	159 U	162 U	205 U	<b>452</b>	2060 U	156 U
<b>GROs/BTEX (mg/kg)</b>						
Benzene	0.051 U	0.053 U	0.12 U	0.43 U	0.066 U	0.051 U
Toluene	<b>0.42</b>	0.053 U	<b>0.59</b>	0.43 U	0.066 U	0.051 U
Ethylbenzene	0.051 U	0.053 U	0.12 U	<b>1.4</b>	0.066 U	0.051 U
m,p-Xylene	<b>0.097</b>	0.053 U	<b>0.17</b>	<b>5.4</b>	0.066 U	0.051 U
o-Xylene	0.051 U	0.053 U	0.12 U	<b>4</b>	0.066 U	0.051 U
<b>DRO/RROs (mg/kg)</b>						
Gasoline	5.1 U	5.3 U	R	R	6.6 U	5.1 U
Diesel Range Organics	11 U	10 U	<b>6800</b>	<b>21000</b>	<b>5800</b>	<b>76</b>
Residual Range Organics	<b>44</b>	21 U	<b>3200</b>	<b>1800</b>	<b>45000</b>	<b>610</b>
<b>Inorganics (mg/kg)</b>						
Aluminum	<b>10100</b> JK	<b>5040</b> JK	<b>5070</b>	<b>7030</b>	<b>8680</b>	<b>11800</b>
Arsenic	<b>2.5</b>	<b>1.9</b> JB (2) <sup>a</sup>	<b>3.6</b>	<b>3.1</b> JB	<b>2.7</b>	<b>3.7</b>
Barium	<b>94.5</b>	<b>69.9</b>	<b>115</b>	<b>61.5</b> JB	<b>116</b>	<b>64.5</b>
Calcium	<b>2010</b>	<b>1280</b>	<b>4970</b>	<b>9450</b>	<b>9100</b>	<b>63100</b>
Chromium	<b>9.2</b>	<b>1.3</b> JB (2) <sup>a</sup>	<b>5.7</b>	<b>9.7</b>	<b>11</b>	<b>18.5</b>
Cobalt	<b>5.9</b> JB (10) <sup>a</sup>	<b>2.2</b> JB (10) <sup>a</sup>	<b>3.4</b> JB	<b>4.6</b> JB	<b>5.6</b> JB	<b>8.3</b>
Copper	<b>9.4</b>	<b>3.4</b> JB (5) <sup>a</sup>	<b>23.4</b>	<b>20.6</b>	<b>18.9</b>	<b>22.4</b>
Iron	<b>14800</b>	<b>9640</b> JK	<b>15600</b>	<b>9580</b>	<b>16200</b>	<b>19000</b>
Lead	<b>3.6</b> JK (5.2) <sup>b</sup>	<b>5.6</b> JK (8.06) <sup>b</sup>	<b>326</b>	<b>13.2</b>	<b>244</b>	<b>4.3</b>
Magnesium	<b>2560</b>	<b>1210</b>	<b>3250</b>	<b>2670</b>	<b>2920</b>	<b>6840</b>
Manganese	<b>307</b>	<b>328</b>	<b>261</b>	<b>282</b>	<b>397</b>	<b>325</b>
Mercury	0.05 U	0.04 U	0.06 U	0.1 U	0.07 U	0.05 U
Nickel	<b>6.9</b> JB (8) <sup>a</sup>	<b>1.1</b> JBK (8) <sup>a</sup>	<b>6.2</b> JB	<b>10.2</b> JB	<b>10.9</b>	<b>20.3</b>
Potassium	<b>1490</b>	<b>1560</b>	<b>1840</b>	<b>543</b> JB	<b>1120</b> JB	<b>658</b> JB
Vanadium	<b>28.1</b>	<b>6.9</b> JBK (10) <sup>a</sup>	<b>15.5</b>	<b>29.2</b>	<b>33.5</b>	<b>48.3</b>
Zinc	<b>33.6</b>	<b>23.5</b>	<b>170</b>	<b>24.5</b>	<b>38.2</b>	<b>35.4</b>

Key at end of table.

Table 6-1

**PUMP STATION COMPLEX**  
**SURFACE SOIL AND SUBSURFACE SOIL ANALYTICAL RESULTS SUMMARY**  
**CANOL PUMP STATION J**  
**MILE POST 1,285.5 ALASKA HIGHWAY, ALASKA**

	BACKGROUND		SOURCE			
EPA Sample Number	98314029	98314030	98314004	98314005	98314006	98314007
Sample Location Number	BG01SS	BG02SS	PC05SS	PC06SS	PC07SS	PC08SS
Depth (feet bgs)	0-0.5	2	0-0.5	2.0-3.0	0-0.5	2.0-3.0
VOCs ( $\mu\text{g}/\text{kg}$ )						
2-Pentanone, 4-methyl-	4.9 UJK	2.4 U	2.2 U	2.2 U	5.2 U	92.2 U
2-Propanone	98.5 UJK	115 U	67.7 U	43.7 U	105 U	1840 U
Benzene	4.9 UJK	2.4 U	2.2 U	2.2 U	5.2 U	92.2 U
Benzene, (1-methylethyl)-	4.9 UJK	2.4 U	2.2 U	2.2 U	5.2 U	92.2 U
Benzene, 1,2,4-trimethyl-	4.9 UJK	2.4 U	2.2 U	2.2 U	5.2 U	92.2 U
Benzene, 1,2-dimethyl-	4.9 UJK	2.4 U	2.2 U	2.2 U	5.2 U	<b>664</b>
Benzene, 1,3,5-trimethyl-	4.9 UJK	2.4 U	2.2 U	2.2 U	5.2 U	<b>9350</b>
Benzene, 1-methyl-4-(1-methylethyl)-	4.9 UJK	2.4 U	2.2 U	2.2 U	5.2 U	<b>221</b>
Benzene, tert-butyl-	4.9 UJK	2.4 U	2.2 U	2.2 U	5.2 U	<b>534</b>
Carbon disulfide	4.9 UJK	2.4 U	2.2 U	4.3 U	5.2 U	<b>111</b>
Ethylbenzene	4.9 UJK	2.4 U	2.2 U	2.2 U	5.2 U	92.2 U
MP-Xylene	9.8 UJK	4.7 U	4.4 U	4.3 U	10.5 U	184 U
Naphthalene	9.8 UJK	4.7 U	4.4 U	4.3 U	10.5 U	184 U
Toluene	4.9 UJK	2.4 U	<b>31.1</b>	2.2 U	<b>99.5</b>	<b>130</b>
SVOCs ( $\mu\text{g}/\text{kg}$ )						
2,4-Dimethylphenol	159 U	162 U	159 U	160 U	161 U	2380 U
4-Methylphenol	159 U	162 U	159 U	160 U	161 U	2380 U
Bis(2-ethylhexyl) phthalate	796 U	809 U	794 U	799 U	804 U	11900 U
Dibenzofuran	159 U	162 U	159 U	160 U	161 U	2380 U
Naphthalene	159 U	162 U	159 U	160 U	161 U	2380 U
Naphthalene, 1-methyl-	159 U	162 U	159 U	160 U	161 U	<b>33200</b>
Naphthalene, 2-methyl-	159 U	162 U	159 U	160 U	161 U	2380 U
Phenanthrene	159 U	162 U	159 U	160 U	161 U	2380 U
Phenol	159 U	162 U	159 U	160 U	161 U	2380 U
Phenol, 2-methyl-	159 U	162 U	159 U	160 U	161 U	2380 U
Pyrene	159 U	162 U	159 U	160 U	161 U	<b>915 JQ</b>
Retene	159 U	162 U	159 U	160 U	161 U	<b>3120</b>
GROs/BTEX (mg/kg)						
Benzene	0.051 U	0.053 U	0.054 U	0.13 U	0.063 U	<b>0.18</b>
Toluene	<b>0.42</b>	0.053 U	<b>0.083</b>	0.13 U	0.063 U	0.064 U
Ethylbenzene	0.051 U	0.053 U	0.054 U	0.13 U	0.063 U	<b>0.11</b>
m,p-Xylene	<b>0.097</b>	0.053 U	<b>0.16</b>	0.13 U	0.063 U	<b>2.5</b>
o-Xylene	0.051 U	0.053 U	0.054 U	0.13 U	0.063 U	<b>1.1</b>
DRO/RROs (mg/kg)						
Gasoline	5.1 U	5.3 U	5.4 U	R	6.3 U	R
Diesel Range Organics	11 U	10 U	<b>14</b>	1900	<b>2500</b>	<b>67000</b>
Residual Range Organics	<b>44</b>	21 U	<b>92</b>	110	<b>8500</b>	<b>15000</b>
Inorganics (mg/kg)						
Aluminum	<b>10100 JK</b>	<b>5040 JK</b>	<b>5440</b>	<b>4000</b>	<b>5490</b>	<b>5450</b>
Arsenic	2.5	<b>1.9 JB</b> (2) <sup>a</sup>	4.2	<b>1.2 JB</b>	2	1.7 U
Barium	<b>94.5</b>	<b>69.9</b>	<b>65.6</b>	<b>57.2</b>	<b>75.6</b>	<b>90.8</b>
Calcium	<b>2010</b>	<b>1280</b>	<b>2010</b>	<b>1560</b>	<b>1650</b>	<b>9540</b>
Chromium	<b>9.2</b>	<b>1.3 JB</b> (2) <sup>a</sup>	3.5	<b>1.6 JB</b>	2.3	<b>6</b>
Cobalt	<b>5.9 JB</b> (10)	<b>2.2 JB</b> (10) <sup>a</sup>	2.2 JB	<b>1.5 JB</b>	<b>1.9 JB</b>	<b>3.2 JB</b>
Copper	<b>9.4</b>	<b>3.4 JB</b> (5) <sup>a</sup>	11.7	<b>3.4 JB</b>	<b>13.6</b>	<b>15.4</b>
Iron	<b>14800</b>	<b>9640 JK</b>	<b>8920</b>	<b>8850</b>	<b>12000</b>	<b>9600</b>
Lead	<b>3.6 JK</b> (5.2) <sup>a</sup>	<b>5.6 JK</b> (8.06) <sup>b</sup>	<b>27.8</b>	<b>12</b>	<b>16.4</b>	<b>6.8</b>
Magnesium	<b>2560</b>	<b>1210</b>	<b>1370</b>	<b>1330</b>	<b>1880</b>	<b>2250</b>
Manganese	<b>307</b>	<b>328</b>	<b>329</b>	<b>323</b>	<b>391</b>	<b>451</b>
Mercury	0.05 U	0.04 U	0.05 U	0.05 U	0.05 U	<b>0.08</b>
Nickel	<b>6.9 JB</b> (8) <sup>a</sup>	<b>1.1 JBK</b> (8) <sup>a</sup>	<b>5.8 JB</b>	<b>1.3 JB</b>	<b>2.5 JB</b>	<b>5.7 JB</b>
Potassium	<b>1490</b>	<b>1560</b>	<b>1870</b>	<b>1780</b>	<b>2410</b>	<b>829 JB</b>
Vanadium	<b>28.1</b>	<b>6.9 JBK</b> (10) <sup>a</sup>	<b>12.8</b>	<b>6.5 JB</b>	<b>10</b>	<b>17.6</b>
Zinc	<b>33.6</b>	<b>23.5</b>	<b>173</b>	<b>26.1</b>	<b>62.8</b>	<b>25.8</b>

Key at end of table.

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**PUMP STATION COMPLEX**  
**SURFACE SOIL AND SUBSURFACE SOIL ANALYTICAL RESULTS SUMMARY**  
**CANOL PUMP STATION J**  
**MILE POST 1,285.5 ALASKA HIGHWAY, ALASKA**

	BACKGROUND		SOURCE			
EPA Sample Number	98314029	98314030	98314008	98314009	98314010	98314011
Sample Location Number	BG01SS	BG02SS	PC09SS	PC010SS	PC11SS	PC12SS
Depth (feet bgs)	0-0.5	2	0-0.5	2.0-3.0	0-0.5	0-0.5
<b>VOCs (µg/kg)</b>						
2-Pentanone, 4-methyl-	4.9 UJK	2.4 U	2 U	2.9 U	2.7 U	2.1 U
2-Propanone	98.5 UJK	115 U	40 U	<b>100</b>	54.6 U	<b>46.2</b>
Benzene	4.9 UJK	2.4 U	2 U	2.9 U	2.7 U	2.1 U
Benzene, (1-methylethyl)-	4.9 UJK	2.4 U	2 U	2.9 U	2.7 U	2.1 U
Benzene, 1,2,4-trimethyl-	4.9 UJK	2.4 U	2 U	2.9 U	2.7 U	2.1 U
Benzene, 1,2-dimethyl-	4.9 UJK	2.4 U	2 U	2.9 U	2.7 U	2.1 U
Benzene, 1,3,5-trimethyl-	4.9 UJK	2.4 U	<b>38.2</b>	2.9 U	2.7 U	2.1 U
Benzene, 1-methyl-4-(1-methylethyl)-	4.9 UJK	2.4 U	2 U	2.9 U	2.7 U	2.1 U
Benzene, tert-butyl-	4.9 UJK	2.4 U	2 U	2.9 U	2.7 U	2.1 U
Carbon disulfide	4.9 UJK	2.4 U	3.9 U	5.8 U	5.4 U	4.1 U
Ethylbenzene	4.9 UJK	2.4 U	2 U	2.9 U	2.7 U	2.1 U
MP-Xylene	9.8 UJK	4.7 U	3.9 U	5.8 U	5.4 U	4.1 U
Naphthalene	9.8 UJK	4.7 U	3.9 U	5.8 U	5.4 U	4.1 U
Toluene	4.9 UJK	2.4 U	<b>2.3</b>	2.9 U	2.7 U	2.1 U
<b>SVOCs (µg/kg)</b>						
2,4-Dimethylphenol	159 U	162 U	159 U	201 U	<b>9270</b>	170 U
4-Methylphenol	159 U	162 U	159 U	201 U	<b>3870</b>	170 U
Bis(2-ethylhexyl) phthalate	796 U	809 U	796 U	1000 U	1160 U	851 U
Dibenzofuran	159 U	162 U	159 U	201 U	232 U	170 U
Naphthalene	159 U	162 U	159 U	201 U	232 U	170 U
Naphthalene, 1-methyl-	159 U	162 U	159 U	201 U	232 U	170 U
Naphthalene, 2-methyl-	159 U	162 U	159 U	201 U	232 U	170 U
Phanthrene	159 U	162 U	159 U	201 U	232 U	170 U
Phenol	159 U	162 U	159 U	201 U	<b>597</b>	170 U
Phenol, 2-methyl-	159 U	162 U	159 U	201 U	<b>988</b>	170 U
Pyrene	159 U	162 U	159 U	201 U	232 U	170 U
Retene	159 U	162 U	159 U	201 U	<b>275</b>	170 U
<b>GROs/BTEX (mg/kg)</b>						
Benzene	0.051 U	0.053 U	0.061 U	0.066 U	0.075 U	0.04 U
Toluene	<b>0.42</b>	0.053 U	0.061 U	0.066 U	0.075 U	0.04 U
Ethylbenzene	0.051 U	0.053 U	0.061 U	0.066 U	0.075 U	0.04 U
m,p-Xylene	<b>0.097</b>	0.053 U	0.061 U	0.066 U	0.075 U	0.04 U
o-Xylene	0.051 U	0.053 U	0.061 U	0.066 U	0.075 U	0.04 U
<b>DRO/RROs (mg/kg)</b>						
Gasoline	5.1 U	5.3 U	R	R	7.5 U	4 U
Diesel Range Organics	11 U	10 U	<b>270</b>	<b>2000</b>	<b>2100</b>	<b>19</b>
Residual Range Organics	<b>44</b>	21 U	<b>190</b>	<b>180</b>	<b>11000</b>	<b>110</b>
<b>Inorganics (mg/kg)</b>						
Aluminum	<b>10100 JK</b>	<b>5040 JK</b>	<b>4330</b>	<b>15400</b>	<b>8910</b>	<b>10700</b>
Arsenic	<b>2.5</b>	<b>1.9 JB</b> (2) <sup>a</sup>	<b>2.1</b>	<b>5.6</b>	<b>3.6</b>	<b>4.5</b>
Barium	<b>94.5</b>	<b>69.9</b>	<b>56.5</b>	<b>141</b>	<b>92.8</b>	<b>77.3</b>
Calcium	<b>2010</b>	<b>1280</b>	<b>1620</b>	<b>6830</b>	<b>5130</b>	<b>9930</b>
Chromium	<b>9.2</b>	<b>1.3 JB</b> (2) <sup>a</sup>	<b>1.9</b>	<b>19.8</b>	<b>76.2</b>	<b>18.4</b>
Cobalt	<b>5.9 JB</b> (10) <sup>a</sup>	<b>2.2 JB</b> (10) <sup>a</sup>	<b>1.8 JB</b>	<b>11.4</b>	<b>10.7 JB</b>	<b>7.5 JB</b>
Copper	<b>9.4</b>	<b>3.4 JB</b> (5) <sup>a</sup>	<b>4.1</b>	<b>37.8</b>	<b>81.1</b>	<b>24.8</b>
Iron	<b>14800</b>	<b>9640 JK</b>	<b>8210</b>	<b>15800</b>	<b>97400</b>	<b>18800</b>
Lead	<b>3.6 JK (5.2)<sup>b</sup></b>	<b>5.6 JK (8.06)<sup>b</sup></b>	<b>13.2</b>	<b>4.4</b>	<b>188</b>	<b>38.6</b>
Magnesium	<b>2560</b>	<b>1210</b>	<b>1340</b>	<b>3310</b>	<b>4180</b>	<b>6440</b>
Manganese	<b>307</b>	<b>328</b>	<b>266</b>	<b>591</b>	<b>662</b>	<b>355</b>
Mercury	0.05 U	0.04 U	<b>0.14</b>	0.06 U	<b>0.09 JB</b>	<b>12</b>
Nickel	<b>6.9 JB</b> (8) <sup>a</sup>	<b>1.1 JBK</b> (8) <sup>a</sup>	<b>6.6</b>	<b>24</b>	<b>35.5</b>	<b>19.4</b>
Potassium	<b>1490</b>	<b>1560</b>	<b>1940</b>	<b>897 JB</b>	<b>1120 JB</b>	<b>911</b>
Vanadium	<b>28.1</b>	<b>6.9 JBK</b> (10) <sup>a</sup>	<b>8.7</b>	<b>62.1</b>	<b>30.5</b>	<b>40.7</b>
Zinc	<b>33.6</b>	<b>23.5</b>	<b>29.6</b>	<b>31.4</b>	<b>208</b>	<b>53.4</b>

Key at end of table.